

STATE OF NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES Division of Purchase and Services	REQUEST FOR QUOTES NO. 261	
	Quotes will be publicly opened: <p style="text-align: center;">December 20, 2007</p>	
	Contract Type: (Open Market)	
Refer <u>ALL</u> Inquiries to: Ed Daughtry Telephone No. 919-715-3882 FAX: 919-715-0684 E-Mail: ed.daughtry@ncmail.net (See page 2 for mailing instructions.)	Issue Date: December 12, 2007 Commodity: Develop a Hydrologic Model of the Neuse River Basin	Using Agency Name: Division of Water Resources Agency Requisition:

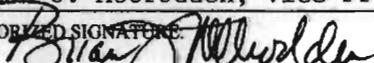
NOTICE TO VENDOR

Quotes, subject to the conditions made a part hereof, will be received at 512 North Salisbury Street, Raleigh, North Carolina until 2:00 p.m. on the day of opening and then opened, for furnishing and delivering the services as described herein. Refer to page 2 for proper mailing instructions. Quotes are subject to rejection unless submitted on this form.

EXECUTION

In compliance with this Request for Quotes, and subject to all the conditions herein, the undersigned offers and agrees to furnish and deliver any or all items upon which prices are offered, at the prices set opposite each item within the time specified herein. By executing this bid, the undersigned certifies that this bid is submitted competitively and without collusion (G.S. 147-33-100).

Failure to execute/sign quote prior to submittal shall render quote invalid. Late quotes are not acceptable.

VENDOR: HydroLogics, Inc.		FEDERAL ID OR SOCIAL SECURITY NO. 52-1413880	
STREET ADDRESS: 811 Mordecai Dr.		P.O. BOX:	ZIP: 27604
CITY & STATE & ZIP: Raleigh, NC 27604		TELEPHONE NUMBER: 919-856-1288	TOLL FREE TEL. NO
Will any work under this contract be performed outside the United States?		YES _____	NO <input checked="" type="checkbox"/>
Where will services be performed: _____			
TYPE OR PRINT NAME & TITLE OF PERSON SIGNING: Brian J. McCrodden, Vice President		FAX NUMBER: 919-831-1295	
AUTHORIZED SIGNATURE: 	DATE: 12/18/07	E-MAIL: bmccrodden@hydrologics.net	

Offer valid for 45 days from date of opening unless otherwise stated here: _____ days (See Instructions for Quotes, Item 5)

ACCEPTANCE OF QUOTE

If any or all parts of this quote are accepted, an authorized representative of the North Carolina Department of Environment and Natural Resources (hereinafter DENR) shall affix their signature hereto and this document and the provisions of the Instructions to Vendors, special terms and conditions specific to this Request for Quotes, the specifications, and the ITS Terms and Conditions shall then constitute the written agreement between the parties. A copy of this acceptance will be forwarded to the successful Vendor(s).

<u>FOR DENR USE ONLY</u>	
Offer accepted and contract awarded this <u>1</u> day of <u>JANUARY</u> , 200 <u>8</u> , as indicated on attached certification,	
by 	(Authorized representative of DENR)

AWARD CRITERIA: Qualified bids will be evaluated and acceptance made in accordance with the lowest price technically acceptable source selection method as defined by 9 NCAC 06B .0302 (3).

The State reserves the right to waive any minor informality or technicality in bids received.

FURNISH AND DELIVER

A complete furnishing and delivery of services for this RFQ consists of three (3) parts, each of which is covered in detail in this RFQ or an identified Attachment accompanying the RFQ.

Deliverable 1 – A scope of work for Deliverable 1 is attached and identified as Exhibit 1

Neuse River Hydrologic Model – The model will be developed by HydroLogics. It will run on a daily time step and have all features and functionality of the recently completed Cape Fear Hydrologic Model including the capability to generate and use statistical hydrologic forecasts for drought management purposes. HydroLogics will use an OASIS software application to develop the Neuse River Basin.

Deliverable 1 will include a statewide license for the North Carolina Department of Environment and Natural Resources to use OASIS software, a software developed and patented by HydroLogics.

Deliverable 2 – A scope of work for Deliverable 2 is attached and identified as Exhibit 2

Demand Data – As a subcontractor to HydroLogics, Moffatt & Nichols will develop historical municipal, industrial, and agricultural demand data for the period of record (1930 through 2006). These data will be used by Hydrologics to develop a data set of daily historical, unregulated inflows at selected points in the hydrologic model for the same period of record. With this set of unregulated flows, the user can simulate the operation of the Neuse River Basin for any set of actual or proposed facilities and operating policies.

Deliverable 3 – A scope of work for Deliverable 3 is attached and identified as Exhibit 3

Administrative Support – As a subcontractor to Hydrologics, the Water Resources Program Manager for the Triangle J Council of Governments will provide organizational and administrative services in support of participating local governments and other stakeholders.

ITEM #	QTY	UNIT	DESCRIPTION	COST
1	1	Each	Develop a hydrologic model of the Neuse River Basin	195,160
2	1	Each	Cost for statewide license for OASIS software	75,000
3	1	Each	Development of historical municipal, industrial, and agricultural demand data for the period of record – 1930/2006	99,000
4	1	Each	Administrative Support provided by the Water Resources Program Manager for the Triangle J Council of Government	25,000

Total Bid Cost \$394,160

ADDITIONAL TERMS AND CONDITIONS

NOTICE TO VENDORS: The State will not be required to evaluate or consider any additional terms and conditions submitted with a Bidder's response. However, in the instance where the Vendor includes terms and conditions for its software products or standard maintenance agreement(s) applicable to products acquired under this Agreement, such terms and conditions may apply to the extent they do not materially change the terms or conditions of this Agreement. In the event of any conflict between the terms or conditions of this Agreement and the Vendor's standard agreement(s), the terms and conditions of this Agreement shall apply in all cases and supersede any provisions contained in Vendor's agreement. The State may review and evaluate any exceptions and/or additional terms and conditions, and may consider such exceptions or terms if the State chooses to negotiate as permitted by 9 NCAC 06B.0302.

documentation for the protest. **Note:** Contract award notices are sent **only** to those actually awarded contracts, and not to every person or firm responding to this solicitation. Bid status and Award notices are posted on the Internet at <http://www.ips.state.nc.us>. All protests will be handled pursuant to Title 9, North Carolina Administrative Code, Chapter 6, Office of Information Technology Services.

14. **MISCELLANEOUS:** Masculine pronouns shall be read to include feminine pronouns and the singular of any word or phrase shall be read to include the plural and vice versa.

ITS Terms and Conditions

Definitions: As used herein;

State shall mean the State of North Carolina, the Office of Information Technology Services as an Agency or in its capacity as the Award Authority.

Purchasing State Agency or Agency shall mean the Agency purchasing the goods or services.

1) Standards: Manufactured items and/or fabricated assemblies comprising Deliverables shall meet all requirements of the Occupational Safety and Health Act (OSHA), and State and federal requirements relating to clean air and water pollution, if applicable. Vendor will provide and maintain a quality assurance system or program that includes any Deliverables and will tender to the State only those Deliverables that have been inspected and found to conform to the requirements of this Contract. All manufactured items and/or fabricated assemblies comprising Deliverables are subject to operation, certification or inspection, and accessibility requirements as required:

- by State or federal Regulation,
- by the Chief Information Officer's (CIO) policy or regulation, or
- acceptance with appropriate standards of operations or uses of said Deliverables as may be shown by identification markings or other means of the appropriate certifying standards organization.

a) **Site Preparation:** Vendors shall provide the Purchasing State Agency complete site requirement specifications for the Deliverables, if any. These specifications shall ensure that the Deliverables to be installed shall operate properly and efficiently within the site environment. The Vendor shall advise the State of any site requirements for any Deliverables required by the State's specifications. Any alterations or modification in site preparation which are directly attributable to incomplete or erroneous specifications provided by the Vendor and which would involve additional expenses to the State, shall be made at the expense of the Vendor.

b) **Goods Return:** Deliverables and any other goods or materials furnished by the Vendor to fulfill technical requirements shall be in good working order and be maintained in good working order by Vendor for the duration of the Contract; unless otherwise provided in a separate maintenance agreement or in the Solicitation Documents. Deliverables failing to meet the State's technical requirements shall be considered non-conforming goods and subject to return to the Vendor for replacement at the State's option, and at the Vendor's expense. The State is responsible for the return costs related to the termination of a Contract, including deinstallation, and freight to destinations within the Continental United States; except in the case of default by the Vendor or delivery of non-conforming goods by Vendor. Shipping or freight charges, if any, paid by the State for non-conforming goods will be reimbursed to the State.

c) **Specifications:** The apparent silence of the specifications as to any detail, or the apparent omission of detailed description concerning any point, shall be regarded as meaning that only the best commercial practice is to prevail and only material and workmanship of the first quality may be used. Upon any notice of noncompliance provided by the State, Vendor shall supply proof of compliance with the specifications. Vendor must provide written notice of its intent to deliver alternate or substitute products, goods or Deliverables. Alternate or substitute products, goods or Deliverables may be accepted or rejected in the sole discretion of the State; and any such alternates or substitutes must be accompanied by Vendor's certification and evidence satisfactory to the State that the function, characteristics, performance and endurance will be equal or superior to the original Deliverables specified.

2) Warranties: Vendor shall assign all applicable third party warranties for Deliverables to the Purchasing State Agency.

3) Personnel: Vendor shall not substitute key personnel assigned to the performance of this Contract without prior written approval by the Agency Contract Administrator. Any desired substitution shall be noticed to the Agency's Contract Administrator accompanied by the names and references of Vendor's recommended substitute personnel. The Agency will approve or disapprove the requested substitution in a timely manner. The Agency may, in its sole discretion, terminate the services of any person providing services under this Contract. Upon such termination, the Agency may request acceptable substitute personnel or terminate the contract services provided by such personnel.

4) Subcontracting: The Vendor may subcontract the performance of required services with other Vendors or third parties, or change subcontractors, only with the prior written consent of the contracting authority. Vendor shall provide the State with complete copies of any agreements made by and between Vendor and all subcontractors. The selected Vendor remains solely responsible for the performance of its subcontractors. Subcontractors, if any, shall adhere to the same standards required of the selected Vendor. Any contracts made by the Vendor with a subcontractor shall include an affirmative statement that the State is an intended third party beneficiary of the contract; that the subcontractor has no agreement with the State; and that the State shall be indemnified by the Vendor for any claim presented by the subcontractor. Notwithstanding any other term herein, Vendor shall timely exercise its contractual remedies against any non-performing subcontractor and, when appropriate, substitute another subcontractor.

5) Vendor's Representation: Vendor warrants that qualified personnel will provide services in a professional manner. "Professional manner" means that the personnel performing the services will possess the skill and competence consistent with the

beneficial interest, in the subject matter of this Contract; obligation or contract for future award of compensation as an inducement or consideration for making this Contract. Subsequent discovery by the State of non-compliance with these provisions shall constitute sufficient cause for immediate termination of all outstanding contracts. Violations of this provision may result in debarment of the Vendor(s) or Vendor(s) as permitted by 9 NCAC 06B.1009(f), 06B.1030, or other provision of law.

11) Availability of Funds: Any and all payments to Vendor are expressly contingent upon and subject to the appropriation, allocation and availability of funds to the Agency for the purposes set forth in this Contract. If this Contract or any Purchase Order issued hereunder is funded in whole or in part by federal funds, the Agency's performance and payment shall be subject to and contingent upon the continuing availability of said federal funds for the purposes of the Contract or Purchase Order. If the term of this Contract extends into fiscal years subsequent to that in which it is approved such continuation of the Contract is expressly contingent upon the appropriation, allocation, and availability of funds by the N.C. Legislature for the purposes set forth in the Contract. If funds to effect payment are not available, the Agency will provide written notification to Vendor. If the Contract is terminated under this paragraph, Vendor agrees to take back any affected Deliverables and software not yet delivered under this Contract, terminate any services supplied to the Agency under this Contract, and relieve the Agency of any further obligation thereof. The State shall remit payment for Deliverables and services accepted prior to the date of the aforesaid notice in conformance with the payment terms.

12) Payment Terms: Payment terms are Net 30 days after receipt of correct invoice or acceptance of the Deliverables, whichever is later; unless a period of more than 30 days is required by the Agency. The Purchasing State Agency is responsible for all payments under the Contract. No additional charges to the Agency will be permitted based upon, or arising from, the Agency's use of a Business Procurement Card. The State may exercise any and all rights of Set Off as permitted in Chapter 105A-1 et. seq. of the N.C. General Statutes and applicable Administrative Rules. Upon Vendor's written request of not less than 30 days and approval by the State or Agency, the Agency may:

- a) Forward the Vendor's payment check(s) directly to any person or entity designated by the Vendor, or
- b) Include any person or entity designated in writing by Vendor as a joint payee on the Vendor's payment check(s), however
- c) In no event shall such approval and action obligate the State to anyone other than the Vendor and the Vendor shall remain responsible for fulfillment of all Contract obligations.

13) Acceptance Criteria: In the event acceptance of Deliverables is not described in additional Contract documents, the State shall have the obligation to notify Vendor, in writing ten calendar days following installation of any Deliverable described in the Contract if it is not acceptable. The notice shall specify in reasonable detail the reason(s) a deliverable is unacceptable. Acceptance by the State shall not be unreasonably withheld; but may be conditioned or delayed as required for installation and/or testing of Deliverables. Final acceptance is expressly conditioned upon completion of all applicable inspection and testing procedures. Should the Deliverables fail to meet any specifications or acceptance criteria the State may exercise any and all rights hereunder, including such rights provided by the Uniform Commercial Code as adopted in North Carolina. Deliverables discovered to be defective or failing to conform to the specifications may be rejected upon initial inspection or at any later time if the defects contained in the Deliverables or non-compliance with the specifications was not reasonably ascertainable upon initial inspection. If the Vendor fails to promptly cure the defect or replace the Deliverables, the State reserves the right to cancel the Purchase Order, contract with a different Vendor, and to invoice the original Vendor for any differential in price over the original Contract price. When Deliverables are rejected, the Vendor must remove the rejected Deliverables from the premises of the State Agency within seven (7) calendar days of notification, unless otherwise agreed by the State Agency. Rejected items may be regarded as abandoned if not removed by Vendor as provided herein.

14) Equal Employment Opportunity: Vendor shall comply with all Federal and State requirements concerning fair employment and employment of the disabled, and concerning the treatment of all employees without regard to discrimination by reason of race, color, religion, sex, national origin or physical disability.

15) Inspection at Vendor's Site: The State reserves the right to inspect, during Vendor's regular business hours at a reasonable time, upon notice of not less than two (2) weeks, and at its own expense, the prospective Deliverables comprising equipment or other tangible goods, or the plant or other physical facilities of a prospective Vendor prior to Contract award, and during the Contract term as necessary or proper to ensure conformance with the specifications/requirements and their adequacy and suitability for the proper and effective performance of the Contract.

16) Advertising/Press Release: The Vendor absolutely shall not publicly disseminate any information concerning the Contract without prior written approval from the State or its Agent. For the purpose of this provision of the Contract, the Agent is the Purchasing Agency Contract Administrator unless otherwise named in the solicitation documents.

17) Confidentiality: In accordance with 9 NCAC 06B.0207 and 06B.1001 and to promote maximum competition in the State competitive bidding process, the State may maintain the confidentiality of certain types of information described in N.C. Gen. Stat. §132-1 et. seq. Such information may include trade secrets defined by N.C. Gen. Stat. §66-152 and other information exempted from the Public Records Act pursuant to N.C. Gen. Stat. §132-1.2. Vendor may designate appropriate portions of its response as confidential, consistent with and to the extent permitted under the Statutes and Rules set forth above, by marking the top and bottom of pages containing confidential information with a legend in boldface type "CONFIDENTIAL". By so marking any page, the Vendor warrants that it has formed a good faith opinion, having received such necessary or proper review by counsel and other knowledgeable advisors that the portions marked confidential meet the requirements of the Rules and Statutes set forth above. *However, under no circumstances shall price information be designated as confidential.* The State may serve as custodian of Vendor's confidential information and not as an arbiter of claims against Vendor's assertion of confidentiality. If an action is brought pursuant to N.C. Gen. Stat. §132-9 to compel the State to disclose information marked confidential, the Vendor agrees that it will

Vendor, at its option and expense, either to procure for the State the right to continue using the goods/hardware or software, or to replace or modify the same to become noninfringing and continue to meet procurement specifications in all material respects. If neither of these options can reasonably be taken, or if the use of such goods/hardware or software by the State shall be prevented by injunction, the Vendor agrees to take back such goods/hardware or software, and refund any sums the State has paid Vendor less any reasonable amount for use or damage and make every reasonable effort to assist the State in procuring substitute Deliverables. If, in the sole opinion of the State, the return of such infringing Deliverables makes the retention of other items of Deliverables acquired from the Vendor under this Contract impractical, the State shall then have the option of terminating the Contract, or applicable portions thereof, without penalty or termination charge. The Vendor agrees to take back such Deliverables and refund any sums the State has paid Vendor less any reasonable amount for use or damage.

e) Vendor will not be required to defend or indemnify the State if any claim by a third party against the State for infringement or misappropriation (i) results from the State's alteration of any Vendor-branded product or Deliverable, or (ii) results from the continued use of the good(s) or Services and Deliverables after receiving notice they infringe a trade secret of a third party.

f) Nothing stated herein, however, shall affect Vendor's ownership in or rights to its preexisting intellectual property and proprietary rights.

21) Access to Persons and Records: Pursuant to N.C. General Statute 147-64.7, the Agency, the State Auditor, appropriate federal officials, and their respective authorized employees or agents are authorized to examine all books, records, and accounts of the Vendor insofar as they relate to transactions with any department, board, officer, commission, institution, or other agency of the State of North Carolina pursuant to the performance of this Contract or to costs charged to this Contract. The Vendor shall retain any such books, records, and accounts for a minimum of three (3) years after the completion of this Contract. Additional audit or reporting requirements may be required by any Agency, if in the Agency's opinion, such requirement is imposed by federal or state law or regulation.

22) Assignment: Vendor may not assign this Contract or its obligations hereunder except as permitted by 09 NCAC 06B.1003 and this Paragraph. Vendor shall provide reasonable notice of not less than thirty (30) days prior to any consolidation, acquisition, or merger. Any assignee shall affirm this Contract attorning to the terms and conditions agreed, and that Vendor shall affirm that the assignee is fully capable of performing all obligations of Vendor under this Contract. An assignment may be made, if at all, in writing by the Vendor, Assignee and the State setting forth the foregoing obligation of Vendor and Assignee.

23) Insurance Coverage: During the term of the Contract, the Vendor at its sole cost and expense shall provide commercial insurance of such type and with such terms and limits as may be reasonably associated with the Contract. As a minimum, the Vendor shall provide and maintain the following coverage and limits:

a) **Worker's Compensation** - The Vendor shall provide and maintain Worker's Compensation Insurance, as required by the laws of North Carolina, as well as employer's liability coverage with minimum limits of \$100,000.00, covering all of Vendor's employees who are engaged in any work under the Contract. If any work is sublet, the Vendor shall require the subcontractor to provide the same coverage for any of his employees engaged in any work under the Contract ; and

b) **Commercial General Liability** - General Liability Coverage on a Comprehensive Broad Form on an occurrence basis in the minimum amount of \$2,000,000.00 Combined Single Limit (Defense cost shall be in excess of the limit of liability); and

c) **Automobile** - Automobile Liability Insurance, to include liability coverage, covering all owned, hired and non-owned vehicles, used in connection with the Contract. The minimum combined single limit shall be \$500,000.00 bodily injury and property damage; \$500,000.00 uninsured/under insured motorist; and \$5,000.00 medical payment; and

d) Providing and maintaining adequate insurance coverage described herein is a material obligation of the Vendor and is of the essence of this Contract. All such insurance shall meet all laws of the State of North Carolina. Such insurance coverage shall be obtained from companies that are authorized to provide such coverage and that are authorized by the Commissioner of Insurance to do business in North Carolina. The Vendor shall at all times comply with the terms of such insurance policies, and all requirements of the insurer under any such insurance policies, except as they may conflict with existing North Carolina laws or this Contract. The limits of coverage under each insurance policy maintained by the Vendor shall not be interpreted as limiting the Vendor's liability and obligations under the Contract.

24) Dispute Resolution: The parties agree that it is in their mutual interest to resolve disputes informally. A claim by the Vendor shall be submitted in writing to the Agency Contract Administrator for decision. A claim by the State shall be submitted in writing to the Vendor's Contract Administrator for decision. The Parties shall negotiate in good faith and use all reasonable efforts to resolve such dispute(s). During the time the Parties are attempting to resolve any dispute, each shall proceed diligently to perform their respective duties and responsibilities under this Contract. If a dispute cannot be resolved between the Parties within thirty (30) days after delivery of notice, either Party may elect to exercise any other remedies available under this Contract, or at law. This term shall not constitute an agreement by either party to mediate or arbitrate any dispute.

25) Default: In the event any Deliverable furnished by the Vendor during performance of any Contract term fails to conform to any material requirement of the Contract specifications, notice of the failure is provided by the State and the failure is not cured within ten (10) days, or Vendor fails to meet the requirements of Paragraph 13) herein, the State may cancel and procure the articles or services from other sources; holding Vendor liable for any excess costs occasioned thereby, subject only to the limitations provided in Paragraphs 28) and 29) and the obligation to informally resolve disputes as provided in Paragraph 24) of these Terms and Conditions. Default may be cause for debarment as provided in 09 NCAC 06B.1030. The State reserves the right to require performance guaranties pursuant to 09 NCAC 06B.1031 from the Vendor without expense to the State. The rights and remedies of the State provided above shall not be exclusive and are in addition to any other rights and remedies provided by law or under the Contract.

c) Vendor shall not be liable for damages arising out of or caused by an alteration or an attachment not made or installed by the Vendor, or for damage to alterations or attachments that may result from the normal operation and maintenance of the Vendor's goods.

30) General Indemnity: The Vendor shall hold and save the State, its officers, agents and employees, harmless from liability of any kind, including all claims and losses, with the exception of consequential damages, accruing or resulting to any other person, firm or corporation furnishing or supplying work, services, materials or supplies in connection with the performance of this Contract. The foregoing indemnification and defense by the Vendor shall be conditioned upon the following:

- a) The Agency shall give Vendor written notice within thirty (30) days after it has actual knowledge of any such claim(s) or action(s) filed; and
- b) The Vendor shall have the sole control of the defense of any such claim(s) or action(s) filed and of all negotiations relating to settlement or compromise thereof, provided, however, that the Agency or State shall have the option to participate at their own expense in the defense of such claim(s) or action(s) filed.

31) Changes: This Contract and subsequent purchase order(s) is awarded subject to shipment of quantities, qualities, and prices indicated by the order or Contract, and all conditions and instructions of the Contract or proposal on which it is based. Any changes made to this Contract or purchase order proposed by the Vendor are hereby rejected unless accepted in writing by the Agency or State Award Authority. The State shall not be responsible for Deliverables or services delivered without a purchase order from the Agency or State Award Authority.

32) Stop Work Order: The State may issue a written Stop Work Order to Vendor for cause at any time requiring Vendor to suspend or stop all, or any part, of the performance due under this Contract for a period up to 90 days after the Stop Work Order is delivered to the Vendor. The 90-day period may be extended for any further period for which the parties may agree.

- a) The Stop Work Order shall be specifically identified as such and shall indicate that it is issued under this term. Upon receipt of the Stop Work Order, the Vendor shall immediately comply with its terms and take all reasonable steps to minimize incurring costs allocable to the work covered by the Stop Work Order during the period of work suspension or stoppage. Within a period of 90 days after a Stop Work Order is delivered to Vendor, or within any extension of that period to which the parties agree, the State shall either:
 - i) Cancel the Stop Work Order, or
 - ii) Terminate the work covered by the Stop Work Order as provided for in the termination for default or the termination for convenience clause of this Contract.
- b) If a Stop Work Order issued under this clause is canceled or the period of the Stop Work Order or any extension thereof expires, the Vendor shall resume work. The State shall make an equitable adjustment in the delivery schedule, the Contract price, or both, and the Contract shall be modified, in writing, accordingly, if:
 - i) The Stop Work Order results in an increase in the time required for, or in the Vendor's cost properly allocable to the performance of any part of this Contract, and
 - ii) The Vendor asserts its right to an equitable adjustment within 30 days after the end of the period of work stoppage; provided that if the State decides the facts justify the action, the State may receive and act upon a proposal submitted at any time before final payment under this Contract.
- c) If a Stop Work Order is not canceled and the work covered by the Stop Work Order is terminated in accordance with the provision entitled Termination for Convenience of the State, the State shall allow reasonable direct costs resulting from the Stop Work Order in arriving at the termination settlement.
- d) The State shall not be liable to the Vendor for loss of profits because of a Stop Work Order issued under this term.

33) Reserved

34) Time is of the Essence. Time is of the essence in the performance of this Contract.

35) Date and Time Warranty: The Vendor warrants that any Deliverable, whether hardware, firmware, middleware, custom or commercial software, or internal components, subroutines, and interface therein which performs any date and/or time data recognition function, calculation, or sequencing, will provide accurate date/time data and leap year calculations. This warranty shall survive termination or expiration of the Contract.

36) Independent Contractors: Vendor and its employees, officers and executives, and subcontractors, if any, shall be independent Vendors and not employees or agents of the State. This Contract shall not operate as a joint venture, partnership, trust, agency or any other business relationship.

37) Transportation: Transportation of Deliverables shall be FOB Destination; unless otherwise specified in the solicitation document or purchase order. Freight, handling, hazardous material charges, and distribution and installation charges shall be included in the total price of each item. Any additional charges shall not be honored for payment unless authorized in writing by the Purchasing State Agency. In cases where parties, other than the Vendor ship materials against this order, the shipper must be instructed to show the purchase order number on all packages and shipping manifests to ensure proper identification and payment of invoices. A complete packing list must accompany each shipment.

38) Notices: Any notices required under this Contract should be delivered to the Contract Administrator for each party. Unless otherwise specified in the Solicitation Documents, any notices shall be delivered in writing by U.S. Mail, Commercial Courier or by hand.

39) Titles and Headings: Titles and Headings in this Contract are used for convenience only and do not define, limit or proscribe the language of terms identified by such Titles and Headings.

Exhibit 1

HydroLogics' SCOPE OF WORK

HydroLogics will be responsible for developing an OASIS application of the Neuse River Basin. It will also coordinate with the project partners, organize project meetings, assist in data collection, and maintain overall responsibility to deliver the project in accordance with schedule and cost.

TASK 1: Develop inflow data from 1930 to September 2007

- Unimpair daily streamflow data. This will require collecting data on reservoir operations, water withdrawals and discharges, evaporation, precipitation, and streamflows. A consultant, Moffatt & Nichol, will provide data on withdrawals and discharges, both as a time series for historical adjustments to streamflows and as a monthly pattern for modeling. Discharges will be linked to withdrawals. Data will be collected for up to 30 irrigation withdrawals, 30 municipal withdrawals, 15 industrial withdrawals, 15 reservoirs, and 20 streamflow gages.
- Use a statistical hydrology program called *fillin* to complete missing flow records for up to 20 gages.
- Provide DSS script files to simplify future updates of the inflow data set

Schedule: A draft of the inflow data set will be completed no later than 8 months following the Notice to Proceed (NtP), or two months after receiving the demand data being assembled by Moffatt and Nichol. In coordination with the project's Technical Advisory Committee, calibration efforts will be undertaken between months nine and twelve leading to a final inflow data set no later than 12 months following the NtP.

TASK 2: Build an OASIS application of the Neuse River Basin with the following features:

- A clickable, map-based schematic with up to 125 nodes representing reservoirs, withdrawals, discharges, stream gages, and other inflow locations. The map will be provided electronically by DWR.
- Up to 20 inflow nodes including all the long-term USGS gages and extending downstream no further than Neuse River at Kinston, below which gages are tidally influenced. The inflow development process will ensure that natural, or unimpaired, flows match the gaged flows on a monthly basis.
- Operating rules for Falls Lake, the Eno River voluntary capacity use area, and the Durham, Orange County, Apex, and Raleigh water supply systems (including interconnections and any drought management protocols). The operating rules for other reservoirs in the basin will include upper and lower rule curves and minimum flow requirements, if any.

- **Installation of the model on the DWR server to include setting up user accounts and access privileges.**

Training will be provided for up to 20 people working two per computer at a location of DENR's choosing. DENR will be responsible for providing the facility and the ten desktop or laptop computers. HydroLogics will require access to the facility and computers the day prior to the training to load the model and ancillary software onto the computers and verify proper operation.

Schedule: The training will be conducted no later than 24 months following the NIP.

For those crops typically irrigated, irrigation will be estimated as a function of the deficit of required crop use for specific crops. Crop acreages and crop water use curves will be compared to precipitation on a weekly basis.) Refer to Attachment A for detailed description of the methods used for the Cape Fear River Basin Model.

Municipal & industrial withdrawals and discharges will be computed for the period 1930-2006 based on review of databases, census data and interviews. Municipal withdrawal and discharge records will be extrapolated back to 1930 based on the census data.

2.0 Deliverables

The data collected for the period from 1930 – 2006 (including the USGS river discharge gage records, NOAA precipitation & evaporation gage records, and agricultural/municipal/industrial withdrawals and discharges) will be transferred to Hydrologics in electronic format (in Excel or as a text file). Attachment B is an example of the format the data series will be provided in.

A technical memorandum will be prepared that documents the methods used to develop agricultural, industrial and municipal data series for the model development.

3.0 Schedule

Moffatt & Nichol will be available to commence work as soon as authorization is provided. It is expected that the data collection will be completed within 5 months of the Notice to Proceed, but will be dependant upon others. The actual time required to complete the data collection will depend on the cooperation by municipalities, governmental agencies and industries to provide discharge and withdrawal data. The total estimated project duration is 6 months from receipt of the signed contract or Notice to Proceed.

4.0 Estimate of Cost

The proposed services will be provided at a fixed price based on the scope of work identified. Estimated fee for services by Moffatt and Nichol is estimated by Task as follows:

Task 1 – Meetings	\$ 6,200
Task 2 – Data Collection & Analysis	\$ 90,000
TOTAL	\$ 96,200

Any additional services beyond the base scope of work may be provided in accordance to the following hourly rates. Travel expenses and materials will be billed at cost with a ten percent markup for overhead costs.

Fee Schedule

Moffatt & Nichol

Principal	\$160.00/hour
Senior Engineer	\$120.00/hour
Hydraulic Engineer	\$115.00/hour
GIS Specialist/Hydraulic Engineer	\$98.00/hour
Clerical	\$68.00/hour

Exhibit 3

Neuse Hydrologic Model
TJCOG Project Support Proposal
7/17/2006

Total Budget for Project Support \$24,000

Components: Provide Project Management Support
Review Documents
Provide Stakeholder Group Support

Project costs are based on the following rates.

	FY07	FY08
Sydney Miller billable rate:	\$ 76.00	\$ 80.00
Mileage reimbursement rate:	\$ 0.445	\$ 0.465

Provide Project Management Support

Responsibilities: Develop Neuse Model project concept
Develop stakeholder list
Develop cost sharing structure
Obtain water system data

Period: FY 2007
Total Hours: 80
Total Miles: 128

Total Cost to Provide Project Management Support: **\$6,000**

Review Documents

Responsibilities: Review all documents developed by DWR and consultants and provide comments
Period: FY 2007 - FY 2008
Total Hours: 20

Total Cost to Review Documents: **\$2,000**

Provide Stakeholder Group Support

Responsibilities: Prepare meeting agendas
Organize meeting materials
Facilitate meetings
Prepare meeting summaries
Manage stakeholder data base
Facilitate communication between meetings
Support DWR's web site development

Period: FY 2007 - FY 2008
Number of Meetings: 12
Hours Per Meeting: 15
Total Hours: 180

Travel Miles Per Meeting: 32
Travel Time Per Meeting: 1.5
Total Hours: 18
Total Miles: 384

Total Cost to Facilitate Stakeholder Group Meetings: **\$16,000**